### DIRECTIONS

From I-93 north of Manchester, take Exit 10 and head south on West River Road (a.k.a. Front Street). Go about 1 mile (crossing the town line from Hooksett into Manchester) and turn right (west and north) onto Hackett Hill Road. Travel approx. 0.7 miles and turn left (west) onto Countryside Blvd. Go about half a mile to where the road just starts to curve right. The



preserve entrance/trailhead is on the left. Reverse direction and park along the south side of the road.

# PRESERVE-USE GUIDELINES

This preserve is open to the public for recreation and education. Please, for the protection of the area and its inhabitants, and for everyone's enjoyment:

- FOOT TRAVEL ONLY (NO HORSES OR BIKES)
- NO PETS
- CARRY OUT TRASH
- STAY ON MARKED TRAILS
- NO REMOVAL OR DESTRUCTION OF PLANTS, WILDLIFE, OR MINERALS
- HUNTING ONLY IN SOUTHERN PORTION (SOUTH OF POWERLINE)
- NO CAMPING OR OPEN FIRES

### THE NATURE CONSERVANCY

The Nature Conservancy is an international, non-profit conservation organization. Its mission is to preserve the full array of biological diversity by finding, protecting, and maintaining the best examples of natural communities, ecosystems, and endangered species in the natural world. In New Hampshire, the Conservancy owns 26 nature preserves, has protected more than 118,000 acres of land, and represents more than 7,000 members. For more information about The Nature Conservancy's work, please contact them at:

The Nature Conservancy 22 Bridge Street 4<sup>th</sup> Floor Concord, NH 03301-4876 (603) 224-5853

www.nature.org/newhampshire

### ATLANTIC WHITE CEDAR SWAMPS

Atlantic white cedar (*Chamaecyparis thyoides*) ranges from southern Maine to Florida and the Gulf of Mexico, mainly in freshwater wetlands along the coast. It is a relatively long-lived species that can exceed 300 years of age. In New Hampshire, the oldest known living tree of this species is about 215 years old. Atlantic white cedar is sometimes found in association with black gum (*Nyssa sylvatica*), another very long-lived tree species that also occurs in the Manchester Cedar Swamp complex.

With a combined total of less than 500 acres, Atlantic white cedar swamps are one of the rarest wetland types in New Hampshire. Only four of the state's unique Atlantic white cedar swamps are larger than 40 acres (Manchester Cedar Swamp is 42 acres). Atlantic white cedar swamps provide critical habitat for many plant and animal species, some of which are very rare in the state.

Four different kinds of Atlantic white cedar swamps have been described in New Hampshire. The type at Manchester Cedar Swamp is the globally rare Atlantic white cedar - giant rhododendron swamp. It occurs at fewer than ten swamps in New England, and this is the only one north of Massachusetts.

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This brochure was created by the NH Natural Heritage Bureau as part of a series designed to educate the public about the state's special plants and natural communities. For more guides, please visit: <a href="http://nh.gov/dred/divisions/forestandlands/bureaus/naturalheritage/Guides.htm">http://nh.gov/dred/divisions/forestandlands/bureaus/naturalheritage/Guides.htm</a>



NEW HAMPSHIRE NATURAL HERITAGE BUREAU

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www.nh.gov/dred/divisions/forestandlands/bureaus/naturalheritage (the DFL is an equal opportunity employer and educator)



# NH NATURAL HERITAGE BUREAU

# VISITING NEW HAMPSHIRE'S BIODIVERSITY

# MANCHESTER CEDAR SWAMP



a preserve owned and managed by



This brochure paid for with funds from the NH Conservation License Plate www.mooseplate.com



### TRAIL DESCRIPTION:

At The Nature Conservancy's Manchester Cedar Swamp preserve, visitors will encounter several unusual natural vegetation communities along three loop trails. A short, 500-foot long access trail leads from Countryside Boulevard, past the trail register (1), to the central *Woodland Loop*.

# Woodland Loop

This central trail winds through early successional forest. Common trees include white pine, red oak, and yellow birch (2). Many boulders rise above the ground to either side of the trail as remnants of glacial history. Look for low-growing wintergreen, partridgeberry, trailing arbutus, and bracken fern scattered among the leaf litter. You may also see chestnut saplings along the trail. A large glacial erratic boulder looms in the woods to the west of the trail (9) inside this loop.

# Cedar Loop

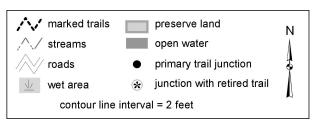
This short trail takes you through a small cove of cedar swamp at the northern tip of a much larger cedar swamp. In the swamp (3), the dominant trees are Atlantic white cedar and red maple. Shrubs and herbs here include giant rhododendron, winterberry, mountain laurel, highbush blueberry, and cinnamon fern, all growing in a lush carpet of peat mosses. Notice the large black gum tree (4) near the trail as you cross the inflow to the cedar basin. Black gum trees, recognizable by their deeply furrowed bark ridges and stag-headed upper trunks, are uncommon in New Hampshire and are the oldest trees of any kind in New England.

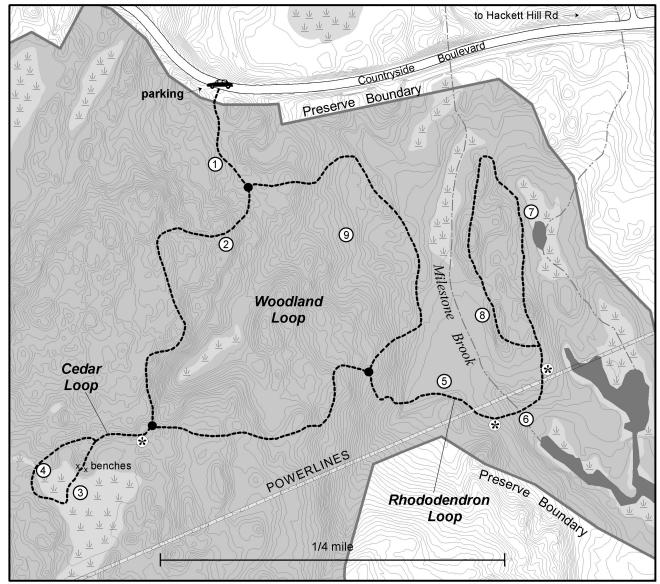
## Rhododendron Loop

This trail passes by several dark green thickets of giant rhododendron, a shrub that grows in large, interwoven colonies. Giant rhododendron blooms in late spring, producing large, showy clusters of pale pink or white flowers above the broad, evergreen leaves. Leaving the Woodland Loop, the trail first drops steeply and passes through a damp hemlock forest with mossy rocks (5). After you cross the powerline heading southward, continue to bear left to cross Milestone Brook (6), recross the powerline (heading northward), and reach the loop portion of this trail. The loop winds past a beaver dam and an associated marsh (7). Notice all the standing dead trees, called snags, drowned when the area was flooded. Snags provide good habitat for various birds and other small animals. The trail then traverses a ridge between drainages, with more giant rhododendron in a mixed hardwood-hemlock forest (8).

### TRAIL NOTES:

These trails travel over moderate terrain, with some hills and uneven footing. Please wear appropriate footwear. The stream crossing of Milestone Brook can be tricky during high water flow - cross at your own discretion. Locations marked with an asterisk (\*) denote trail junctions where you should be careful to stay on the marked path. Circled numbers on the map are discussed in the trail description.





Contour features developed by the City of Manchester, 1995

Map and photo by Ben Kimball, January 2003